

Hydrocarbon binder spreaders

Applying surface dressings, tack coats and prime coats



RINCHEVAL experience and know-how combined with SECMAIR's capacity for innovation now allows the maintenance sector of the FAYAT group to offer the market's most complete range of spreaders.

Demand for more versatility in site equipment has also led us to offer our customers a wide range of additional equipment which as such improves the effectiveness and profitability of our spreaders.



An adapted solution for each type of site

Our range of spreaders meets the needs of all types of spreading sites

- Tack coats and prime coats on the sites require high yield (ROADSPRAYER),
- The tack coats and the re-stocking of equipment on sites (SERVIROUTE),
- The fibre glass base technique (FIBERSEALER),
- The surface dressings with emulsion (EUROSPRAYER),
- The all-binder surface dressings with high yield (EDENSPRAYER).

We shall cover the criteria for choosing equipment from an ergonomic and economic standpoint, but also by describing the peripheral functions, such as automation.

Contents

4	Choice criteria
5	Tack coats and prime coats with high yield
6	Surfacing with fibre glass filler
7	Surface dressings with emulsion
8	The tack coats and the re-stocking of equipment on sites
10	All-binder surface dressings with high yield
12	Ergonomics, health and safety
13	Traceability
14	Quality and inspections
15	Range



Choice criteria

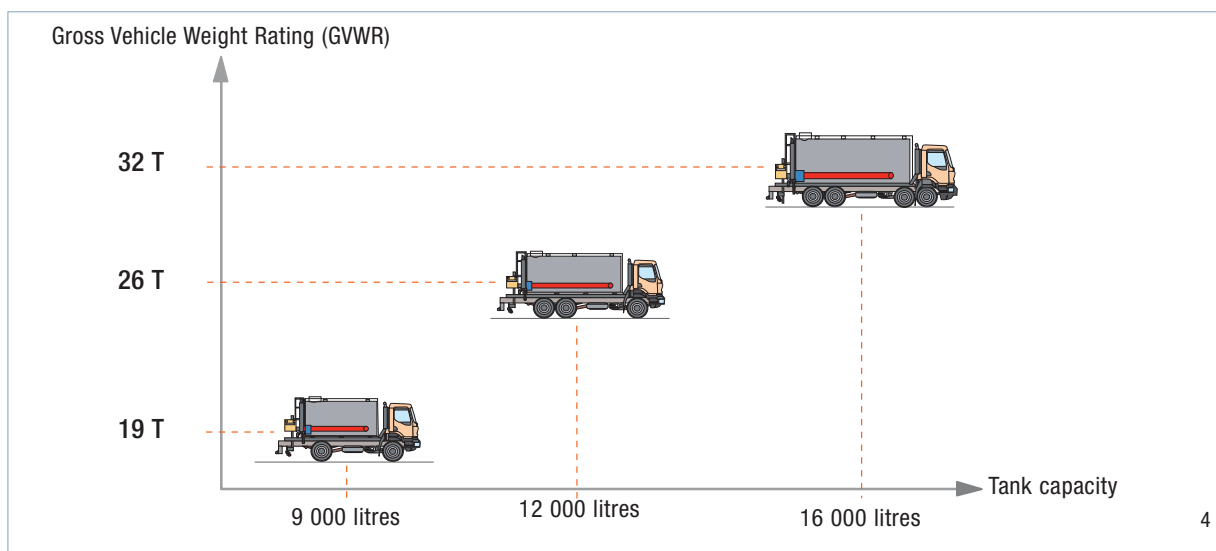
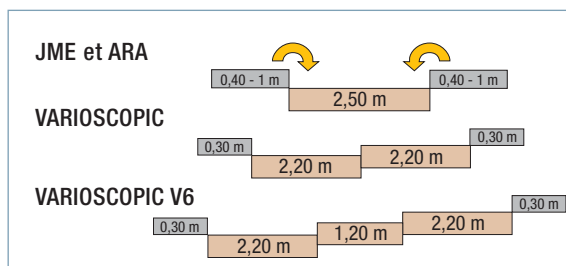
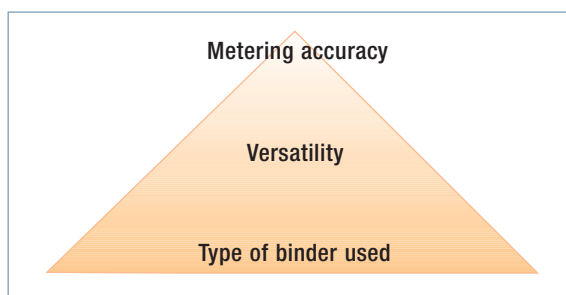
Choosing the spreader that is best suited for a given need is done with regards to the following criteria:

- The type of binder (hot binder, cut back, emulsion, etc.),
- The versatility of the equipment (re-stocking in fuel, water, etc.),
- Metering accuracy.

These criteria are taken into account in this order and determine the range of our machines.

The spreading width also determines spreader selection. There are 3 types of bars for widths that can range from 2.50 m to 6.20 m:

- Mechanical spray bar with toggle lever extensions,
- Pneumatic spray bar with toggle lever extensions,
- Pneumatic spray bar and telescopic displacement.



The ROADSPRAYER range

Range of spreaders for applying tack coats and prime coats. These machines allow binders to be spread in all conditions (heat, dust, etc.).

Applications

The average metering for the tack coats is from 0.300 to 0.500 g/ m², and the prime coats require a magnitude of 1.3 kgs/m². The spreading system in our ROADSPRAYER range is adapted to this demand.

- Sprayer axle spread: 150 mm,
- Binder pump allowing for a metering range from 0.300kg/ m² to 2 kgs/ m².

Ergonomics and safety

- A general spreader control is located in the cabin,
- All of the peripheral functions (binder suction, stripping, routine maintenance), can be performed on the ground.

Quality of the spreading

- Hyper-frequency radar makes it possible to view in real time the displacement speed of the machine,
- A metering nomogram is provided with each spreader.

Type of bar

- JME and ARA toggle bar lever.

Heating

- Burner open.



The FIBERSEALER range

Introducing cut fibre glass into an emulsion layer makes it possible to reinforce the surfacings and as such extend the service life of the road. This technology is used in treating and preventing cracking.

FIBERSEALERS are able to cut the fibre glass in place according to a metering that is accurate to the nearest 5 g/m² at a speed of 4 km/h.



This recognised technique applies of course to the wearing course within the framework of road maintenance by surface dressings.

But it also applies in the case of tack coats before hot asphalt (SAMI).

- FIBERSEALER simultaneously spreads glass fibre between two emulsion coats,
- The metering of the binder as well as that of the glass fibres is regulated very accurately by computer.

The FIBERSEALER range

- Capacities of 6,000 or 12,000 litres of emulsion on 2 or 3 axle truck,
- Trailer towed behind the spreader,
- Capacity of 12,000 litres emulsion on a semi-trailer.



The EUROSPRAYER range

Wearing surface dressings require quality metering and in particular a highly accurate coefficient of transversal variation. That is why, in addition to high-performance regulation, we must offer a reliable spreading system that guarantees the best possible conditions for execution.

Operating parameters

- The metering is programmed in the cabin on the on-board computer,
- The speed of displacement of the vehicle is picked up using hyper-frequency radar,
- The working width, in other words the number of sprays open, are selected by the operator in the cabin,
- All of this information is constantly looped in order to correct the flow of the pump in real time.



The design of the bar itself determines the quality of the result

- 100 mm axle spread,
- JME and VARIOSCOPIE type spray bar.

Heating

- Automatic regulated burner.



The SERVIRoute range

SERVIRoute is a multi-function spreader that integrates perfectly into an asphalt application team and that makes it possible to optimise the machine's profitability. SERVIRoute can of course carry out the tack coat but it can also be supplemented with equipment upon request.



Traditional function

- 3,000 to 6,000 litres of binder according to the options and type of truck retained,
- JME and VARIOSCOPIE type spray bar,
- Automatic regulated burner.

Auxiliary functions

- 1,000 to 6,000 litres of water according to the options and type of truck retained,
- 450 to 900 litres of fuel according to the options and type of truck retained,
- Adaptable key-lock safes placed between the tanks and the cabin,
- Storage for shovel, mattocks, rake, pneumatic drills, signalling cones, signs, etc.



The machine's compactness is also an essential advantage in urban sites where the number of pieces of equipment is high and the space available is often reduced.

- Minimum overhang (no rear walkway),
- Minimum wheelbase,
- Nesting tanks in order to reduce the length of the vehicle.



Optional equipment

- A bin for collecting site waste, miscellaneous equipment, finisher extensions,
- A crane or jib crane for loading,
- A sweeper equipped with a spraybar positioned in the wheelbase of the vehicle or on a hydraulic plate in the front, allowing the support to be cleaned before the tack layer is applied,
- An automated treatment system for longitudinal seals with air nozzles for cleaning, spreading the binder and chips simultaneously,
- Pneumatic and hydraulic outputs in order to supply the tools (pneumatic drills, cleaning gun, etc.).

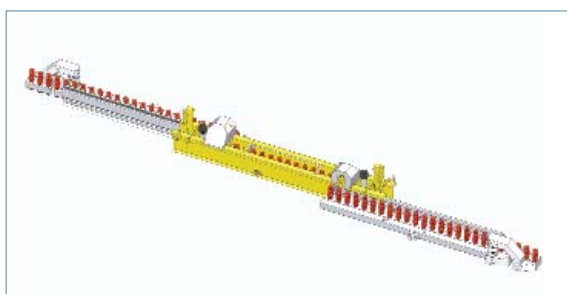
A spreading quality that meets the standard of surface dressings

SERVIRoute has an automated metering device and a spreading system that is adapted to tack layers but also to wearing surface dressings. Simply changing the nozzle makes it versatile for other types of activity.



The EDENSPRAYER range

Hot binders are still widely used in the framework of wearing surface dressing campaigns. The type and composition of these binders as well as certain modified emulsions have led SECMAIR to develop a new spreader.



The spreading quality

- EDENSPRAYER comes standard with a system to vary the flow which allows the pressure in the bar to be adjusted according to the product's viscosity,
- EDENSPRAYER also comes standard with a system for heating the bar with thermal oil or water in order to maintain an ideal temperature in the binder circuit,
- The bar is supplied in 6 points, which as such improves the coefficient of transversal variation,
- The 100% stainless steel bar guarantees its service life in particular with the use of highly acidic binders,
- Optionally, the machine can be equipped with the DUOSPRAY bar with a double row of sprays, which as such limits roping effects.





Reducing energy consumption is a central point in the designing of our new developments

- The insulation of the tank as well as all of the parts that are in contact with the binder are designed in order to remove all of the thermal bridges (100% of the binder circuit is heated),
- The exchange surface of the thermo-fluid heating circuit is 2 times higher than the spreaders on the market,
- Choosing the components of the hydraulic circuit allows for reduction in the consumption of the truck.



Versatility is sought for some customers in order to optimise the use of the truck. Conjugating a spreader and a winter maintenance tool (salt spreader) for example

- Interchangeable via twist-locks,
- Interchangeable via poly-tipper arms.

Machine design is also a priority so that they can fit into the environment as best as possible

- Covering for all the sensitive parts in order to limit vandalism,
- Substantial storage capacities,
- Maximum protection in order to limit binder projections.



Ergonomics, health and safety

All our spreaders are designed with the comfort and safety of users in mind.



Ergonomics

Operations in the cabin are now performed using switches, a joystick or touch-screen. In addition, the peripheral operations (suction, binder stripping, etc.) and routine in maintenance operations (cleaning the binder filter, checking the levels, etc.) are performed on the ground.

Health: no rear walkway

- Our spreaders are controlled from the cabin in total safety, which as such prevents exposing the operators to smoke, dust and noise,
- The positioning of the spray bar is designed in order to reduce discharges of binder into the atmosphere as much as possible.

Safety for operators

- The covers and protective devices on the machines make the dangerous parts inaccessible,
- A rear-view camera can be installed,
- The centre of gravity of the machine is placed as low as possible.



Traceability

The new EC standard on carrying out surface dressings imposes accurate traceability of the sites. The MALAXITU database allows you to record all of the execution conditions for the sites, and it also provides information on productivity and yield.

The 7 advantages of a traceability system

- Break in the system for controlling production,
- Improve communication with the instructing party,
- Be differentiated in a competitive environment,
- Share an existing range of management tools (MIS type),
- Provide the instructing party with proof that his investment is profitable,
- Optimise displacements, and as such reduce polluting emissions,
- Take advantage of a privileged relationship with the equipment supplier.

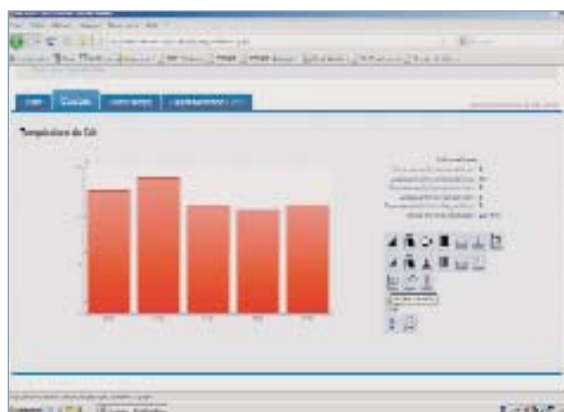
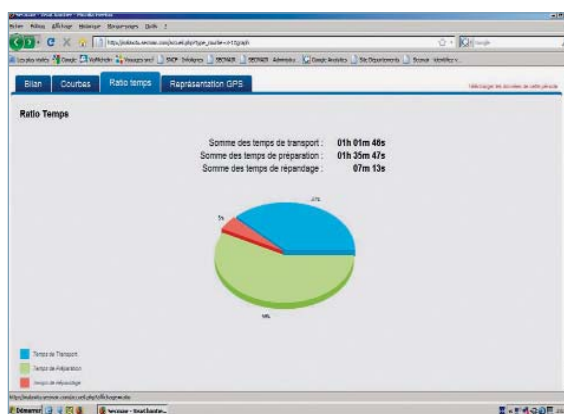
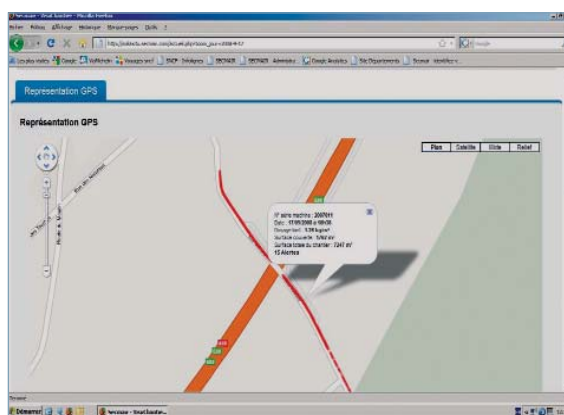
Examples of data provided

- Site mapping,
- GPS position, date and time,
- Transport, waiting and spreading time,
- Instant metering,
- Surfaces and quantities,
- Temperatures,
- Hygrometry.

Data transfer

There are several types of data transfer according to needs

- Recovery of an Excel file (via a USB key),
- Recovery of an Excel file and integration into the VISUCHANTIER operating software,
- Transfer via GSM with access to a web platform, associated with the sending of an email summarising the site.

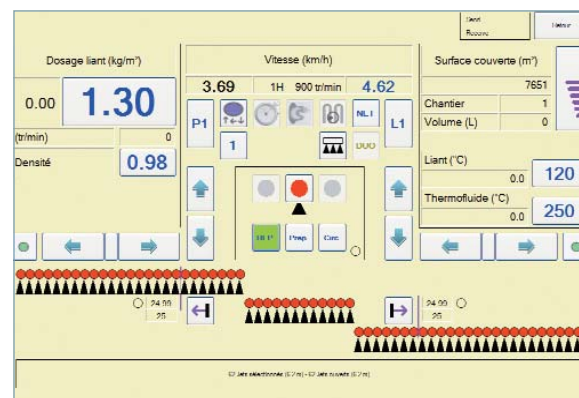


Quality and inspections

Automated systems are developed internally by our research department. The repeatability of binder meterings ensure the control of quality all throughout the sites.

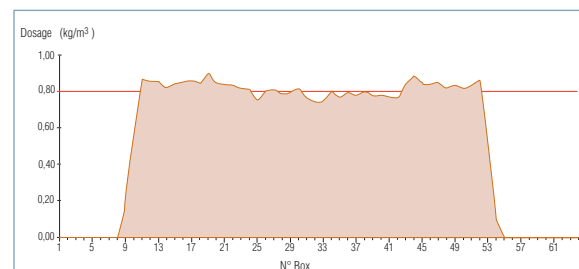
Automated devices

The maximum requirement requested when carrying out a wearing surface dressing is to guarantee a coefficient of transversal variation less than 5%. Our SERVIROUTE, EUROPSRAYER and EDENSPRAYER spreaders all provide a degree of spreading quality that is much higher than what the standard imposes.



Inspections

The transversal dispersal of the equipment is tested on our accredited inspection stations (test benches in out plant and mobile test benches for the French market). Furthermore, we offer a range of test benches in a container for the international markets.



The range

The solutions developed by SECMAIR cover all of the needs for carrying out surface dressing work, tack coats before the asphalt and prime coats.

Spreader	Spreading width	Type of bar	Binder capacity	Heating
ROADSPRAYER	4.50 m	Mechanical or pneumatic toggle lever	7,000 to 16,000 L	Direct heat
SERVIRROUTE	3.20 m to 5.00 m	Toggle lever pneumatic or telescopic	3,000 to 12,000 L	Direct or simplified thermofluid heat
EUROSPRAYER	4.50 m to 5.00 m	Toggle lever pneumatic or telescopic	3,000 to 16,000 L	Direct heat
EDENSPRAYER	5.00 m and 6.20 m	Telescopic	7,000 to 16,000 L	Direct heat or thermofluid

Versatile sprayer-spreader on truck	Spreading width	Binder capacity	Aggregate capacity	Aggregate supply
WAGONNETTE	1.20 m	400 L	1.5 m ³	Hopper
CHIPSEALER 20	3.20 m	3,500 L	4.5 m ³	Tilting hopper
VIASEALER	2.50 m	5,000 L	6 m ³	Hopper
CHIPSEALER 60	3.20 m	5,000 L	7 m ³	Tilting hopper
CHIPSEALER 61	3.20 m to 4.50 m	5,000 L	7 m ³	Belt feeder hopper
CHIPSEALER 80	3.20 m	6,000 L	9 m ³	Tilting hopper
CHIPSEALER 81	3.20 m or 4.50 m	6,000 L	9 m ³	Belt feeder hopper

Versatile sprayer-spreader on truck	Spreading width	Binder capacity	Aggregate capacity	Aggregate supply
CHIPSEALER 40	3.80 m	6,000 L	12 m ³	Tilting hopper
CHIPSEALER 41	3.80 m	6,000 L	12 m ³	Belt feeder hopper
CHIPSEALER 42	4.50 m	9,000 L	12 m ³	Belt feeder hopper

Chip spreader	Spreading width	Type of distribution	Flap opening	Materials collection container
WK	2.50 m or 3.10 m	Gravity system	Manual or pneumatic	Yes
GPB 1 400	3.10 m	Distribution roller	Pneumatic	No
VEYMONT	3.10 m	Distribution roller	Pneumatic	Yes
GPB 14 000	3.10 m	Extracting roller	Pneumatic	No

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